METHOD OF ENHANCING CLEAR FIELD PHASE SHIFT MASKS WITH CHROME BORDER AROUND PHASE 180 REGIONS

ABSTRACT OF THE DISCLOSURE

A mask generation method can enhance clear field phase shift masks using a chrome border around phase 180 regions. An exemplary method involves identifying edges of a 180 degree phase pattern, expanding these edges, and merging the expansions with chrome. An alternative method involves oversizing and undersizing phase 180 data, taking the difference, and merging the difference with chrome. The chrome region on the phase mask can improve mask generation by allowing the chrome on the mask to fully define the quartz etch.

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